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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/724,286

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Jong-Won Seok

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EXAMINER

HONG, HYUN J

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/724,286	<b>Applicant(s)</b> SEOK ET AL.	
	<b>Examiner</b> Hyun J. Hong	<b>Art Unit</b> 2426	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-8 and 11-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-8 and 11-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

This Office Action is in response to an Amendment filed 09/25/09. Claims 1-2, 5-8, 11-13 are pending.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 5-8, 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ezaki (US 2002/0120574) in view of Levy (US 7,224,819) in view of Akins (US 6,526,508).

**Regarding claim 1, 7, 13,** Ezaki discloses a broadcasting server system for protecting and managing digital broadcasting contents, comprising:

A control means for generating access control information and a control word based on subscriber information, the access control information including entitlement control message and entitlement management message ([0172]);

An additional data generation means for generating additional data including use control metadata, tool information metadata, and content purchase information metadata to protect and manage the digital broadcasting contents ([0025, 0070]);

A media encoding means for compressing the A/V media signal ([0102]);

An encrypting means for encrypting the compressed A/V media signal ([0016]);

A multiplexing means for receiving and multiplexing the compressed and encrypted A/V media signal to thereby output a media transport stream ([0138]);

A re-multiplexing means for receiving and re-multiplexing the media transport stream, the additional data and the access control information to thereby output a re-multiplexed signal ([0142]);

A scrambling means for scrambling the re-multiplexed signal by using the control word ([0092]);

Ezaki does not disclose a watermarking means for receiving an identification of a broadcasting content, which is referred to as a content ID, and the use control metadata, and watermarking an A/V media signal by using the content ID and the use control metadata as watermarks.

However, Levy discloses receiving an identification of a broadcasting content, which is referred to as a content ID, and the use control metadata, and watermarking an A/V media signal by using the content ID and the use control metadata as watermarks (col. 13 lines 55-67). It would have been obvious to combine the watermarking of Levy into the user control system of Ezaki. This would allow broadcasting providers to include copyright control data directly into their broadcast media.

Ezaki in view of Levy does not specifically disclose CAT, use control metadata including copy control information, broadcasting flag, and retention information, wherein the content ID is abstracted and used for determining whether a content is an unlawful broadcasting content when the broadcasting content is distributed unlawfully, or the content ID is abstracted and used for determining whether a content that are

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broadcasted currently is authentic or not after monitoring; wherein the use control metadata include the CCI, the BF, and the RI, determines from the CCI whether a broadcasting content can be copied freely, copied one time only and never copied, identifies from the BF whether the content is a broadcasting content, and indicates in the RI the length of time that the broadcasting content can remain stored in a hard disk of a receiver.

However, Akins discloses CAT (fig. 7); use control metadata including copy control information (col. 31 line 20-21), broadcasting flag (col. 31 line 15 *If event is active it is being broadcasted*), and retention information (fig. 19 “latest end”), wherein the content ID is abstracted and used for determining whether a content is an unlawful broadcasting content when the broadcasting content is distributed unlawfully, or the content ID is abstracted and used for determining whether a content that are broadcasted currently is authentic or not after monitoring (col. 13 lines 18-40); wherein the use control metadata include the CCI, the BF, and the RI, determines from the CCI whether a broadcasting content can be copied freely (col. 31 line 20-21), copied one time only and never copied, identifies from the BF whether the content is a broadcasting content (col. 31 line 15), and indicates in the RI the length of time that the broadcasting content can remain stored in a hard disk of a receiver (fig. 19 “latest end”). It would have been obvious to combine the conditional access information of Akins into the conditional access system of Ezaki in view of Levy. This would enable providers to set rules on how their content is stored and copied.

**Regarding claim 2, 8,** Ezaki discloses a purchase result management means for managing broadcasting content purchase result of a user ([0025]);

A monitoring result management means for managing broadcasting content monitoring result ([0025]);

**Regarding claim 5, 11,** Ezaki discloses wherein the tool information metadata include:

Protection and management tool information on the protection and management tools used for protecting and managing the broadcasting content ([0025]);

Decrypting information needed for decrypting the broadcasting content to which the protection and management tools are applied, the decrypting information including encrypted transport stream information ([0030]);

Location information on locations to which the protection and management tools should be applied ([0028]);

Replaceable tool information on kinds of tools that can be replaced; and tools ([0028]);

Ezaki does not disclose watermarking information.

However, Levy discloses watermarking information (col. 13 lines 55-67). It would have been obvious to combine the watermarking of Levy into the user control system of Ezaki. This would allow broadcasting providers to include copyright control data directly into their broadcast media.

**Regarding claim 6, 12,** Ezaki discloses wherein the content purchase information metadata include purchase conditions used when the user purchases the broadcasting content, and a list of contents that can be purchased ([0013]).

### ***Response to Arguments***

In response to applicant's argument:

There is nothing in this cited portion of Ezaki which discloses "generating a control word based on subscriber information." *Emphasis Added.*

*Additionally, since there is no teaching of "a control word," Ezaki also fails to disclose "a scrambling means for scrambling the re-multiplexed signal by using the control word" as recited in the claims. While the Examiner alleges that Ezaki, paragraph [0092], discloses this element, this portion of Ezaki merely states:*

*"The CAS processing section 12 descrambles a scrambling process applied to broadcast content on the basis of a contract concerning CAS (Conditional Access System) exchanged with the content distributor. For digital broadcasting in Japan, a common scrambling method called "Multi2" is adopted for both BS and CS. However, since the CAS process itself is not related to the scope and spirit of the present invention, no further description is given here." (Ezaki, par. [0092])*

*There is no teaching of "a control word" or "scrambling by using the control word" in Ezaki.*

Examiner respectfully disagrees. Using the broadest reasonable interpretation of "control word", The entitlement control message and entitlement management messages of Ezaki, represent types of control words. Ezaki teaches that the rights processing metadata contains use conditions and copy control information for decrypted content ([0075]). This rights processing metadata is contained in various EMM and ECMs which are used to control use of the data that is received ([0162]).

In response to applicant's argument:

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*Further, Ezaki merely discloses the rights processing metadata in Ezaki contains an ECM (Entitlement Control Message) and an EMM (Entitlement Management Message) (Ezaki, par. [0172]). In contrast, the claims recite "the access control information including CAT, entitlement control message (ECM) and entitlement management message (EMM)." Emphasis Added.* Given that there is no teaching in Ezaki of the rights processing metadata including CAT, the rights processing metadata cannot correspond to the "access control information."

Moreover, the Examiner alleges that Ezaki discloses "the use control metadata including copy control information (CCI), broadcasting flag (BF) and retention information (RI), wherein the content ID is abstracted and used for determining whether a content is an unlawful broadcasting content when the broadcasting content is distributed unlawfully, or the content ID is abstracted and used for determining whether a content that are broadcasted currently is authentic or not after monitoring," citing Ezaki, paragraphs [0085], [0111], [0112], and [0164] (.Office Action, page 3). Applicant respectfully disagrees and submits that nothing in the cited portions of Ezaki discloses, *inter alia*, CCI, BP, RI and content ID, as recited in the claims. In fact, Ezaki merely states:

Applicant respectfully submits that there is no teaching of the above elements of the claims in Ezaki.

Arguments are moot in view of new grounds of rejection.

### ***Conclusion***

Claims 1-2, 5-8, 11-13 are rejected.

### ***Correspondence Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hyun J. Hong whose telephone number is (571)270-1553. The examiner can normally be reached on M-F (9:30a-7:00p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hirl can be reached on (571)272-3685. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. J. H./  
Examiner, Art Unit 2426

/Joseph P. Hirl/  
Supervisory Patent Examiner, Art Unit 2426  
January 4, 2010